containing gas and an inert gas, said inert gas and said oxygen-containing gas being present in said gaseous mixture at a ratio at which spontaneous etching is substantially avoided.

16. (Amended) A method for forming at least one opening in an organic-containing insulating layer, comprising the steps of:

covering said organic-containing insulating layer with a bilayer, said bilayer comprising a resist hard mask layer, being formed on said organic-containing insulating layer, and a resist layer being formed on said resist hard mask layer,

patterning said bilayer,

creating said first part in said opening by plasma etching said insulating layer in a reaction chamber containing a gaseous mixture, said gaseous mixture comprising a fluorine-containing gas, an inert gas and essentially not an oxygen-containing gas,

controlling said plasma etching, while creating said first part in said opening, in a manner that the side walls of said first part of said opening are fluorinated during said plasma etching to thereby enhance the anisotropy of said plasma etching, and

creating said second part in said opening by plasma etching said organic-containing insulating layer in a reaction chamber containing a gaseous mixture, said gaseous mixture comprising an oxygen-containing gas and an inert gas, said inert gas and said oxygen-containing gas being present in said gaseous mixture at a ratio at which spontaneous etching is substantially avoided and said opening is completely formed whereby said resist layer is removed.